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Social comparison and self-judgment in eating psychopathology: The mediator effect of body image inflexibility

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"Não sou nada.

Nunca serei nada.

Não posso querer ser nada.

À parte isso, tenho em mim
todos os sonhos do mundo."

Fernando Pessoa

Abstract- Social comparison and self-judgment in eating psychopathology: The mediator effect of body image inflexibility

Body image inflexibility is the unavailability of experiencing current perceptions, sensations, emotions and thoughts related with body image, in a complete and intentional way, while the individual pursues his values in other areas of his life. This construct involves inflexible cognitive patterns and rigid behavioural, disruptive to an individual's life. Recent research has shown body image inflexibility as one of the most important predictors for explaining the symptoms associated with eating disorders. Nevertheless, the role of this construct on eating psychopathology remains unclear. The aim of this study was to explore the role of body image inflexibility in the relationship between social comparison based on physical appearance, self-judgment and eating psychopathology.

Participants in this study were 342 female students aged 13 to 25 years old, who were administered self-report instruments to measure the study constructs.

Results indicated that the impact of unfavourable social comparisons based on physical appearance on eating psychopathology is partially mediated by body image inflexibility, while the impact of self-judgment on eating psychopathology is fully mediated by the same process. These results imply that the relationship between these mechanisms of maladaptive emotion regulation (e.g., unfavourable social comparisons based on physical appearance and self-judgment) and eating psychopathology depends upon on how individual experience current perceptions, sensations, emotions and thoughts associated with the one's body image.

This study offers important insights for clinical work with eating disorders patients by suggesting the importance of assessing and intervening on the body image inflexibility in girls with body image and eating difficulties.

Keywords: Body Image Flexibility; Eating Psychopathology; Social Comparison

Based on Physical Appearance; Self-judgment; mediator effect

**Resumo- A Comparação social e o auto-julgamento na psicopatologia alimentar:
o efeito mediador da inflexibilidade relacionada com a imagem corporal**

A inflexibilidade relacionada com a imagem corporal é a indisponibilidade para experienciar percepções, sensações, emoções e pensamentos associados à imagem corporal, que decorrem no momento presente, de uma forma completa e intencional, enquanto o indivíduo persegue os seus valores noutras áreas da vida. Este constructo envolve padrões cognitivos inflexíveis e padrões de comportamentos rígidos, disruptivos para a vida de um indivíduo. Pesquisa recente mostrou a inflexibilidade relacionada com a imagem corporal como um dos preditores mais importantes na explicação de sintomas associados a distúrbios alimentares. No entanto, o papel deste constructo na psicopatologia alimentar continua a não ser claro. O objetivo deste estudo foi explorar o papel da inflexibilidade relacionada com imagem corporal na relação entre as comparações sociais baseadas na aparência física, o auto-julgamento e a psicopatologia alimentar.

Os participantes deste estudo foram 342 estudantes do sexo feminino com idades compreendidas entre os 13 e os 25 anos, a quem foram administrados os instrumentos de autorresposta para medir os constructos em estudo.

Os resultados indicaram que o impacto das comparações sociais desfavoráveis com base na aparência física na psicopatologia alimentar é parcialmente mediado pela inflexibilidade relacionada com a imagem corporal, enquanto que o impacto do auto-julgamento sobre psicopatologia alimentar é inteiramente mediado pelo mesmo processo. Estes resultados implicam que a relação entre estes mecanismos de regulação

emocional mal adaptativos (i.e., as comparações sociais desfavoráveis com base na aparência física e o auto-julgamento) e psicopatologia alimentar depende de como cada indivíduo experiencia percepções, sensações, emoções e pensamentos associados à sua imagem corporal, que decorrem no momento presente.

Este estudo oferece insights importantes para o trabalho clínico com pacientes com transtornos alimentares, uma vez parece sugerir a importância de avaliar e intervir sobre a rigidez da imagem corporal em raparigas com estas dificuldades.

Palavras-chave: Inflexibilidade relacionada com a imagem corporal; Psicopatologia alimentar; Comparações sociais baseadas na aparência física; Auto-julgamento, Efeito mediador

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Aos meus grandes amigos, pela amizade, por sempre terem acreditado em mim.

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**Social comparison and self-judgment in eating psychopathology: The mediator effect
of body image inflexibility**

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Social comparison and self-judgment in eating psychopathology: The mediator effect of body image inflexibility

Abstract: Recent research has shown body image inflexibility as one of the most important predictors for explaining the symptoms associated with eating disorders. Nevertheless, the role of this construct on eating psychopathology continues to be unclear. The aim of this study was to explore the role of body image inflexibility in the relationship between mechanisms of social comparison and self-judgment in eating psychopathology.

Participants in this study were 342 female students aged 13 to 25 years old, who were administered self-report instruments to measure the study constructs.

Results indicated that body image-related inflexibility as associated with unfavourable social rank perceptions, self-judgment and eating psychopathology. Furthermore, the impact of unfavourable social comparisons based on physical appearance and self judgment on eating psychopathology are, respectively, partially and fully mediated by body image inflexibility.

This study offers important insights for clinical work with eating disorders patients by confirming the importance of assessing and intervening on the body image inflexibility in girls with body image and eating difficulties

Keywords: Body Image Flexibility; Eating Psychopathology; Social Comparison Based on Physical Appearance; Self-judgment; Mediator effect

1. Introduction

Psychological inflexibility is the incapacity to be in contact with private events, without the need to avoid or to control (e.g., frequency or intensity), when these are unwanted or perceived as negative or harmful (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). In addition, this inability often leads to processes of experiential avoidance and inconsistent behavioural patterns with the values of the individuals life (Hayes et al., 2006; Kashdan, & Rottenberg, 2010; O'Donohue, Fisher, & Hayes, 2003). Currently, extensive literature has demonstrated the psychological inflexibility as a process underlying several psychopathological conditions, including eating psychopathology (Hayes et al., 2006; Masuda & Wendell, 2010; Merwin et al. 2011; Rawal, Park, & Williams, 2010). Specifically, in regard of body image inflexibility, it can be understood as the unavailability of experiencing current perceptions, sensations, emotions and thoughts associated with the body image, in a complete and intentional way, while the individual pursues his values in other areas of his life (Sandoz, Wilson, Merwin, & Kellum, 2013). This construct involves inflexible cognitive patterns (e.g., reflecting the need to control these experiments) and rigid behavioural patterns (e.g., avoidance), disruptive to an individual's life (Sandoz, Wilson, & DuFrene, 2010). Pertinent literature has shown the impact of body image inflexibility on body dissatisfaction and eating psychopathology symptoms (e.g. dieting, bulimic symptoms, and preoccupation with food; Ferreira, Pinto-Gouveia, & Duarte, 2011; Sandoz et al., 2013). Furthermore, the body image inflexibility has appeared as one of the most important predictors for explaining the symptoms associated with eating disorders, appearing with a predictive higher power than body image dissatisfaction (Sandoz et al., 2013). These studies also show that inflexibility as an important process of emotional regulation, with a significant moderator impact on the relationship between body image

dissatisfaction and the eating psychopathology symptoms (Ferreira et al., 2011; Sandoz et al., 2013). Other investigations have demonstrated that body image flexibility is a mediator on the relationship between disordered eating cognitions (e.g., body image dissatisfaction) and dysfunctional behaviours related with eating (Wendell, Masuda, & Le, 2012).

Recently, Pinto-Gouveia, Ferreira, & Duarte (2012) conceptualize body and eating difficulties as emergent of emotional regulation strategy in the context of a social rank mentality. Social rank mentality is characterized by the needing to continually compare themselves with others. This comparison aims to estimate threatening potential and one's status of the competitors and their power, fearing to be less attractive or less good in valued domains (Gilbert, 2000). Extant literature has demonstrated social rank mentality leads to increased vulnerability for multiple emotional and psychopathological difficulties, namely eating disorders (Gilbert, 2005).

According to the evolutionary model, excessive stimulation of a social rank mentality promotes a feeling of inferiority, shame and self-assessment predominantly critical (Ferreira, 2012). Likewise, recent research has shown that individuals with body and eating difficulties tend to have higher levels of self-judgment, isolation, and over-identification (Ferreira, 2012). In other words, these persons tend to present a self–self relationship based on negative judgments (e.g., about oneself, in that one extends feelings of judgment and criticism toward oneself). In fact, evidence has demonstrated that this internal relationship characterized by self-judgment is strongly associated with dysfunctional attitudes and behaviours related with body image and eating (Pinto-Gouveia et al., 2012). Additionally, recent research has shown that unfavourable social comparisons through physical appearance emerge as important factors associated with the experience of shame and the need to compete to avoid inferiority, being an

important factor in the prediction of eating psychopathology (Pinto-Gouveia et al., 2012). In sum, the perception of inferiority or inadequacy in comparison with others (e.g., Krones, Stice, Batres, & Orjada, 2005; O'Brien et al., 2009; Strahan, Wilson, Cressman, & Buote, 2006; Troop Allan, Treasure, & Katzman, 2003) and the perception that others see me as unattractive (Gee & Troop, 2003; Murray, Waller, & Legg, 2000; Sanftner, Barlow, Marschall, & Tangney, 1995) predict greater body dissatisfaction which has a direct effect in explaining dietary behaviours and pursuit for thinness. Thus, in accordance with the evolutionary model, control of weight, body shape and eating patterns can arise as a strategy to deal with this experience of inferiority and shame, namely, as a way to compete for a more secure social position and to ensure social acceptance (Pinto-Gouveia et al., 2012).

Over the years, has been demonstrated that different variables are important to the explanation of eating psychopathology. The complex process that defines eating disorders is also characterized by different mechanisms of maladaptive emotion regulation, such as processes of social comparison and self-judgment (Ferreira, 2012). However, the study of these mechanisms in explaining body and eating difficulties is still incomplete, so this investigation aims to integrate different emotional processes in order to better understand their role in eating psychopathology.

Our hypothesis is that the impact of unfavourable social comparisons based on physical appearance on eating psychopathology depends of the capacity to be in contact with these private negatives events, related with the body. In other words, it is expected that body image inflexibility has the role of mediator between unfavourable social comparisons and eating psychopathology.

In the same way, we consider that the impact of self-judgment on eating psychopathology also depends of body image inflexibility (e.g., the capacity to experience these private negatives events related with the body image).

2. Materials and methods

2.1. Participants

The sample of this study is part of a wider research that is being conducted in the eating disorders' research field. Participants included 342 female students aged 13 to 25 years old. They presented a mean age of 17.76 ($SD = 2.63$) and of 11.40 ($SD = 2.46$) years of education. The mean current BMI of participants was 21.14 ($SD = 2.80$).

2.2. Measures

Demographic Data.

Information includes educational and age variables, as well as current weight and height.

Body Mass Index.

Was calculated participant's BMI dividing weight (in kg) by height (in m) squared (e.g., Wt/Ht^2).

Eating Disorder Examination Questionnaire (EDE-Q; Fairburn, & Beglin, 1994; Machado, 2007).

EDE-Q is a self-report questionnaire widely used to measure of eating-disordered behaviour. It derived from the Eating Disorder Examination interview (EDE), and was

developed to address its logistical limitations (e.g., the time required to administer, the training needed for interviewers and its inappropriateness for group administration; Fairburn & Beglin, 1994; Luce, Crowther, & Pole, 2008).

This questionnaire holds 4 subscale scores (restraint, eating concern, shape concern and weight concern), as well as a global score. The items are scored in a 7 point rating scale. This questionnaire was proved to have good psychometric properties and clinical utility, being recommended for identify eating disorders (for a review see Fairburn, 2008).

Acceptance and Action Questionnaire-II (AAQ-II; Bond, et al., 2011; Pinto-Gouveia, Gregório, Dinis, & Xavier, 2012).

AAQ II was designed to measure psychological flexibility, e.g., to assess willingness to accept unwanted thoughts, perceptions and feelings at the same time which acts according with one's values and goals. The measure, with 10 items (e.g., "My painful memories prevent me from having a fulfilling life"), employs a 7-point Likert scale, ranging from 1 (never true) to 7 (always true). Higher scores demonstrate a greater psychological inflexibility, or experiential avoidance. This questionnaire showed a good reliability in the original (.84 mean alpha coefficient across six samples) and in the Portuguese version ($\alpha = .90$). It also revealed good values of convergent and discriminant reliability (Hayes et al., 2004), as well as good values of temporal reliability (Block-Lerner, Salters-Pedneault, & Tull, 2005; Hayes et al., 2004)

Body Image – Acceptance and Action Questionnaire (BI-AAQ; Sandoz, Wilson, Merwin, & Kellum 2013; Ferreira, Pinto-Gouveia, & Duarte, 2011).

This is a 12-item self-report which evaluates psychological inflexibility regarding to body image (Sandoz et al., 2013). It's asked to the participants to assess the veracity of statements, using a Likert scale of 7 points. Higher scores reflect more body image psychological inflexibility. The BI-AAQ revealed very good psychometric properties in its original version (with an internal consistency of .93) and in its Portuguese version (with an internal consistency of .95).

Social Comparison Rating Scale (SCRS; Allan & Gilbert, 1995; Gato, 2003).

SCRS was developed to measure self-perceptions of social rank and subjective social standing. It is composed by 11 items of bipolar constructs (e.g., inferior/superior). Using a Likert scale ranging from 1 to 10, participants were requested to make a global comparison of themselves in relation to others. This scale has been shown to hold good internal reliability in the Portuguese version and in the original version (with Cronbach's alphas of between .88 and .96 with clinical populations, and between .90 and .91 with student populations; Allan & Gilbert, 1995)

Social Comparison through Physical Appearance Scale (SCPAS; Ferreira, Pinto-Gouveia, Duarte, 2013).

This scale measures the subjective perception of one's attractiveness, social rank and group fit, according to the way one compares herself with others, using physical appearance as a reference. SCPAS comprised two parts, with 12-item each. The participants are instructed to select a number, using a Likert scale ranging from 1 to 10, which best translates the way they feel in relation to other people [e.g., 'When I

physically compare myself with friends, colleagues and other known girls (proximal targets – Part A: Peers) /models, actresses or celebrities (distal targets – Part B: Models) I feel . . . Inferior/Superior, Left out/Accepted, Devalued/Valued’]. Higher scores represent more favourable comparisons. This measure presented a high internal reliability (.94 in Part A: Peers, and .96 in Part B: Models).

Self-Compassion Scale (SCS; Neff, 2003; Castilho & Pinto-Gouveia, 2011).

SCS, comprising 26 items, was developed to assess self-compassion, e.g., a warm and accepting attitude of the negative aspects of the self or life. This scale comprises two main components: a positive one that includes self-kindness, common humanity and mindfulness subscales; and a negative one comprising self-judgment, isolation, and over-identification subscales. For the purpose of this study, a composite measure by the 3 negative dimensions of SCS was computed and defined as self-judgment dimension. This scale was shown to have good internal reliability in the original version (.92; Neff, 2003) and in the Portuguese version (.89; Castilho & Pinto-Gouveia, 2011).

Cronbach’ alphas for all study variables are reported in Table 1.

2.3. Procedures

This research protocol was reviewed and approved by the Ethics Committee of the educational institutions enrolled in the study. Prior to beginning the survey, all participants and their parents (if the subjects were minor) gave their informed consent and were fully informed about voluntary character of their collaboration, confidentiality of the data, as well as the aims and procedures of the study. The measures described above were administered by the authors and completed by the

students at the end of a lecture, with previous knowledge and authorization of the Professor in charge.

2.4. Analytic Strategy

Data analyses were performed using IBM SPSS Statistics 20 (IBM Corp, 2011).

After cleaning the data, which involved exclude those cases which fell outside of the age range of 13-25 years, were used descriptive statistics (means and standard deviations) aiming to explore the characteristics of all variables in study sample ($N = 342$). To discover the association between global psychological inflexibility, body image inflexibility, global social rank, social rank based on physical appearance (e.g., peers and models), self-judgment, and eating psychopathology were performed Pearson correlation coefficients (Cohen, Cohen, West & Aiken, 2003).

Two mediations were tested using linear regression models, following the four-step analysis recommended by Baron and Kenny (1986). In each mediator analysis, was used body image inflexibility as a mediator on the relationship between predictor variables (the social ranking based on physical appearance – Figure 1 – and the self-judgment – Figure 2) and dependent variable (eating psychopathology). The proposed variable (body image inflexibility), according to Baron and Kenny (1986), functions as a mediator when it fulfils these conditions: i) predictor variable significantly regress with the dependent variable; ii) predictor variable significantly regress with the mediator; iii) mediator and predictor variable significantly regress on the outcome. Finally, the predictive relation of social ranking based on physical appearance and self-judgment on eating psychopathology should demonstrate a significant reduction, after accounting the variation attributed to body image inflexibility, when it is added to the model. Moreover, the significance of the indirect effect on the outcome by the predictor

variable was determinate through its effects on the mediator (z is $p < .050$), performing the *Sobel* Test.

3. Results

3.1. Preliminary analyses

The normality of variables distribution was confirmed by the values of Skewness and Kurtosis, which indicated that the assumption of multivariate normality ($|\text{Sk}| < 3$ e $|\text{Ku}| < 8-10$) is plausible (Kline, 1998). Also, preliminary data analyses indicated that these data were suitable for regression analyses following the assumptions of normality, linearity, homoscedasticity, independence of errors and multicollinearity or singularity amongst the variables ($VIF < 5$; Field, 2004).

3.2. Descriptive analyses

Means and standard deviations for the total sample ($N = 342$) are presented in Table 1.

3.3. Correlations

Pearson's correlation coefficients (two-tailed) are presented in Table 1.

The analysis showed that the measures of social comparison (SCRS, SCPAS peers and SCPAS-models) appear positively associated, with high magnitude correlations. At the same time, these measures were inversely linked with the measures of psychological inflexibility (AAQ e BI-AAQ) and the dimension of self-judgment (SJ), as well as with the measure of eating psychopathology (EDE-Q).

Pearson's correlation coefficients demonstrated that AAQ and BI-AAQ were positive and highly correlated with each other, as well as with SJ.

Furthermore, these measures of psychological inflexibility and SJ were significantly, moderately to very high, correlated with the indicator of eating psychopathology, standing out as the stronger magnitude correlation ($r = .77$) the association between BI-AAQ and EDE-Q.

Table 1

Cronbach alpha, Means (M), Standard Deviations (SD) and Intercorrelation scores on self-report measures (N = 342)

Measure	1	2	3	4	5	6	7
1. SCRS	-						
2. SCPAS_peers	.82***	-					
3. SCPAS_models	.67***	.78***	-				
4. AAQ	-.30***	-.29***	-.29***	-			
5. BI-AAQ	-.41***	-.49***	-.50***	.56***	-		
6. SJ	-.39***	-.37***	-.38***	.62***	.61***	-	
7. EDE-Q	-.36***	-.48***	-.48***	.38***	.77***	.51***	-
<i>A</i>	.89	.95	.96	.79	.96	.92	.96
<i>M</i>	65.29	61.08	55.25	35.78	31.77	2.90	1.49
<i>SD</i>	13.72	16.39	18.06	9.90	17.90	.79	1.34

Note. * $p < .050$. ** $p < .010$. *** $p < .001$.

SCRS = Social Comparison Rating Scale; SCPAS_peers and SCPAS_models = Social Comparison through Physical Appearance Scale: Part A and Part B; AAQ II = Acceptance and Action Questionnaire; BI-AAQ = Body Image Acceptance and Action Questionnaire; SJ = Self- judgment dimension of Self-compassion Scale (SCS); EDE-Q = Eating Disorder Examination Questionnaire (global score).

3.4. Mediator analyses

In order to explore the role of psychological inflexibility regarding body image (BI-AAQ) as a possible mediator between: 1) social comparison based on physical appearance with models (SCPAS-models) and 2) self-judgment (SJ), and eating

psychopathology (EDE-Q), we conducted two mediator analyses followed the linear regression model by Baron & Kenny (1986).

3.4.1. Body image inflexibility as a mediator between social rank based on physical appearance and eating psychopathology

The first regression analysis was conducted with social comparison through physical appearance with models (SCPAS-models) as the independent variable and eating psychopathology (EDE-Q) as the dependent variable. This step produced a significant model [$F_{(1,328)} = 99.66, p < .001$], accounting for 23.3% of eating psychopathology ($\beta = -.48, p < .001$). The second analysis was performed to explore whether SCPAS-models predicted BI-AAQ. The results showed that this model was also significant [$R^2 = .25, F_{(1,332)} = 109.92, p < .001$] with $\beta = -.50 (p < .001)$. Lastly, a regression analysis was executed to find out whether BI-AAQ significantly predicted eating psychopathology. Was introduced SCPAS-models and BI-AAQ as the independent variables and EDE-Q as the dependent variable. The final model was also significant [$F_{(2,319)} = 249.20, p < .001$], accounting for 61% of the variance in eating psychopathology. Results show that when is added in the mediator (BI-AAQ), the predictor β is reduced to $-.13 (p = .001)$, as the mediator emerges as the best predictor ($\beta = .71, p < .001$). *Sobel test* was significant ($z = -7.81, p < .001$), demonstrating that body image inflexibility partially mediates the effect of social rank based on physical appearance on eating psychopathology (see Figure 1).

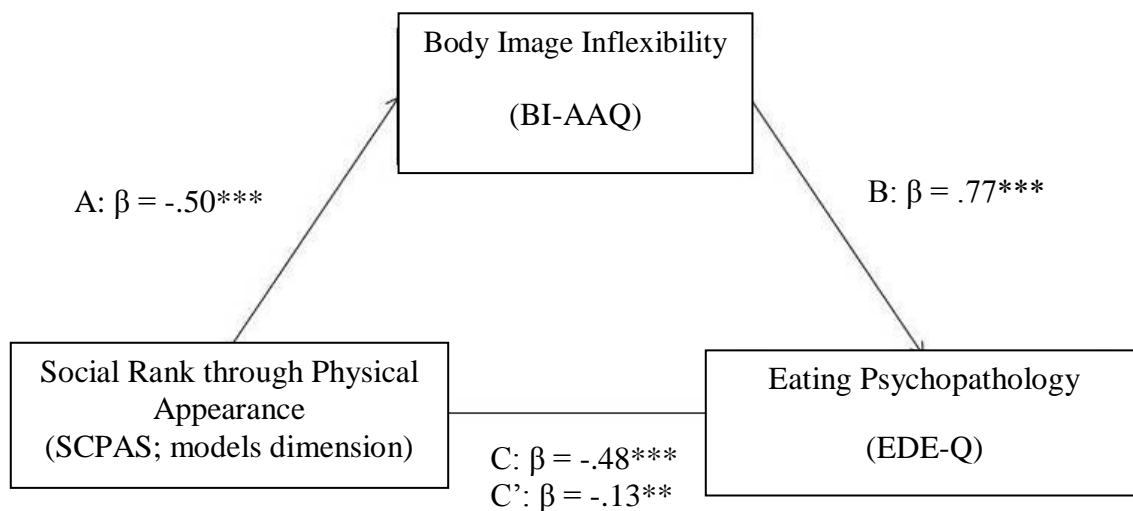


Figure 1. The relation between Models dimension of Social Rank Based on Physical Appearance (SCPAS) and Eating Psychopathology (EDE-Q) mediated by Body Image Inflexibility (BI-AAQ). A = relation between the independent variable and mediator, B = the relation between mediator and dependent variable, C = the direct effect of the independent variable on the dependent variable, and C' = the indirect effect of the independent variable on the dependent variable controlling for the mediator;

* $p < .05$, ** $p < .01$, *** $p < .001$.

3.4.2. Body image inflexibility as a mediator between self-judgment and eating psychopathology

The same procedure was performed to explore the mediator effect of body image inflexibility (BI-AAQ) on the relationship between self-judgment (SJ) and eating psychopathology (EDE-Q).

In the first regression analysis, SJ was used as the independent variable and EDE-Q as the dependent variable. As a result, a significant model was produced [$F_{(1,261)} = 90.93$, $p < .001$], accounting for 25.8% of the independent variable variance ($\beta = .51$; $p < .001$). Other analysis was performed to explore whether SJ predicted BI-AAQ. As a result, was produced a significant model [$R^2 = .38$, $F_{(1, 266)} = 160.51$, $p < .001$] with $\beta =$

-.61 ($p < .001$). Finally, a regression analysis was conducted to determine whether the BI-AAQ significantly predicted EDE-Q. SJ and BI-AAQ were added as the independent variables and EDE-Q as the dependent variable. This model was also significant [$F_{(2,254)} = 188.27, p < .001$], accounting for 59.7% of the independent variable. The predictor β is reduced when the mediator is introduced in and it's no longer significant ($\beta = .039, p = .442$), with body image inflexibility appearing as the only significant predictor of eating psychopathology ($\beta = .75, p < .001$). The indirect effect of SJ on EDE-Q (through its effects on BI-AAQ) was also tested using the *Sobel* Test ($z = 7.69, p < .001$), suggesting that body image psychological inflexibility fully mediates the effect of self-judgment on eating psychopathology (see Figure 2).

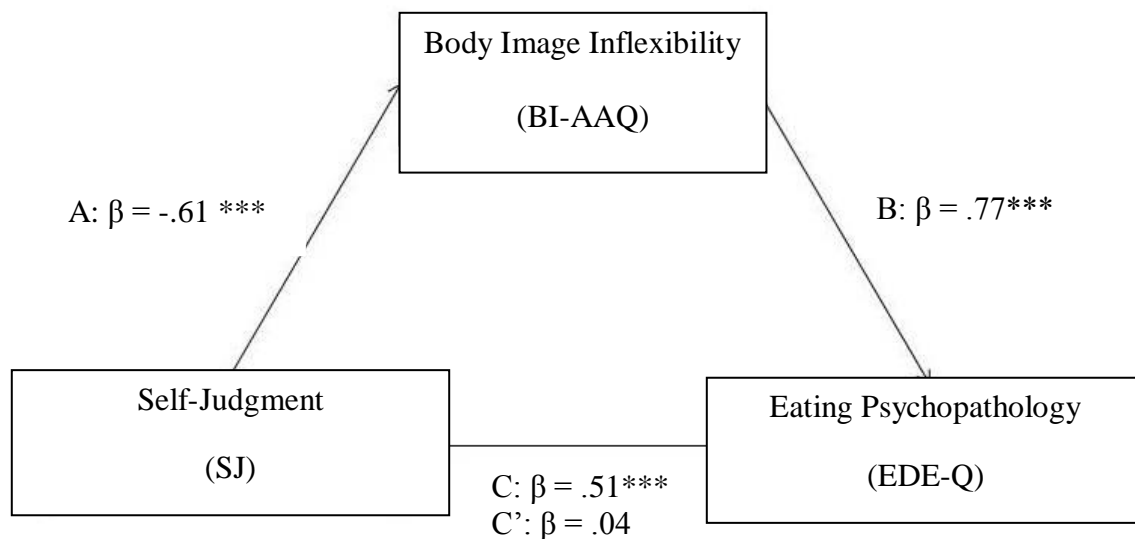


Figure 2. The relation between Self-judgment dimension of Self-Compassion Scale (SCS) and Eating Psychopathology (EDE-Q) mediated by Body Image Inflexibility (BI-AAQ). A = relation between the independent variable and mediator, B = the relation between mediator and dependent variable, C = the direct effect of the independent variable on the dependent variable, and C' = the indirect effect of the independent variable on the dependent variable controlling for the mediator;

* $p < .05$, ** $p < .01$, *** $p < .001$.

4. Discussion

Extensive literature has demonstrated psychological inflexibility as a process underlying several psychopathological conditions, including eating psychopathology (Hayes et al., 2006; Masuda & Wendell, 2010; Rawal et al., 2010). Recent researches have shown the impacts of unwilling to experience the ongoing perceptions, sensations, feeling and thoughts related-body image on body dissatisfaction and disordered eating (Ferreira et al., 2011; Sandoz et al., 2013). These studies also showed body image inflexibility, with a significant moderator effect on the relationship between body image dissatisfaction and eating psychopathology symptoms. Additionally, several authors suggest that this emotional regulation process is more important than body image dissatisfaction to discriminate the risk to development or not eating disorders (Sandoz et al., 2013). Nevertheless, the role of body image inflexibility on eating psychopathology continues to be unclear. To better understand this relationship, in the current study it was examined the role of body image inflexibility as a mediator between social rank based on physical appearance and severity of eating psychopathology. Also, it was examined whether self-judgment was positively related to eating psychopathology and, if so, whether body image inflexibility at least partially mediated the relationship.

Correlation analyses results revealed that global psychological inflexibility and inflexibility related with body image were both positively associated with eating psychopathology symptoms. These results are in agreement with previous research (e.g., about overall psychological inflexibility or specific dimension related to body image; Ferreira et al., 2011; Hayes et al., 2006; Masuda & Wendell, 2010; Rawal et al., 2010; Wendell et al., 2012), that found that individuals who have difficulties to keeping in contact with perceptions, thoughts, beliefs, and feelings, without attempts to avoid or

control (e.g., their intensity, frequency, or form) tend to present an increased of eating psychopathology.

At the same time, obtained results corroborate and add to previous findings (Pinto-Gouveia et al., 2012), showing that unfavourable social comparisons based on physical appearance, either with peers or models, were linked to body image inflexibility and to eating psychopathology. These results suggest that individuals who have a tendency to compare themselves unfavourably with others tend to present difficulties in accept and be in contact with negative thoughts, emotions and feelings related with the body image issues, which may turn these persons even more vulnerable to the presence of difficulties related to the body and eating.

Additionally, these results add to recent research related to body image inflexibility, showing that self-judgment appears positively linked with this emotional process. This means that individuals who present negative judgments about oneself, in that one extends feelings of judgment and criticism toward oneself tend to exhibit lower ability to be in contact with private events related with the body image, without the need to avoid or to control, when these are unwanted or perceived as negative or harmful. Our results also show that this self-self relationship characterized by negative judgment is associated with disturbed attitudes and behaviour related with eating. This is consistent with and adds to the recent research which showed that individuals with eating disorders tend to have higher levels of self-judgment, isolation, and over-identification (Ferreira, 2012).

The key contribution of this study relies on the clarification of how body image inflexibility mediates the relationship between two different variables - social rank based on physical appearance and self-judgment - and eating psychopathology.

Mediational tests' results indicated that body image inflexibility partially mediated the relationship between social rank based on physical appearance and eating psychopathology.

At the same time, the difficult to accepted, negative thoughts, emotions and feelings related with the body image, has been found as fully mediator of relationship between self-judgment and eating psychopathology.

These results imply that the relationship between these mechanisms of maladaptive emotion regulation (e.g., unfavourable social comparisons based on physical appearance and self-judgment) and current eating psychopathology depends upon on how individual experience current perceptions, sensations, emotions and thoughts associated with the one's body image. This shows that the impact of social comparisons through physical appearance and self-judgment on eating psychopathology severity operates through their effect on diminishing one's willingness to accept unwanted thoughts, perceptions and feelings regarding to body image, in a complete way while the individual pursues his values in other areas of his life.

The present investigation has several weaknesses, so the data should be interpreted taking into account some of these methodological limitations. The first restriction is its transversal design, which did not allow for conclusions to be derived. Future investigation should test these findings using a longitudinal design. Other possible limitation is the inherent subjectivity of self-report instruments, which may limit the precision of our conclusions. Nonetheless, this is the first investigation to emphasize the role of body image inflexibility as mediator between social comparisons based on physical appearance and self-judgment, and eating disorders. Furthermore, this study seems contributes for the research and clinical practice in eating psychopathology.

5. Conclusion

This research offers important insights for clinical work with eating disorders patients by suggesting the importance of assessing and intervening on the body image inflexibility in girls with body image and eating difficulties. The data seems to show that negative comparisons and evaluations do not necessarily lead to eating disorders, suggesting that this relationship depends of the body image flexibility. It also suggest the needing to work the acceptance capability of the current negative perceptions, sensations, emotions and thoughts associated with the body image in order to reduce the vulnerability to eating psychopathology. Thus, these results appear to be empirical data which supports the importance to develop body image flexibility in programs of prevention and treatment of eating disorders.

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